

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028232**Date Inspected:** 21-Aug-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** Berry Drake**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG 13 / 14 West**Summary of Items Observed:**

On this date, Quality Assurance Inspector (QAI) Robert A. DeArmond was present at the San Francisco Oakland Bay Bridge job site at Yerba Buena Island to observe erection and welding activities for the San Francisco Oakland Bay Bridge (SFOBB) project. This Quality Assurance Inspector (QAI) observed the following work performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below:

**13WEST**

This QAI inspector observed ABF welding personnel heat transferring the location of Ultrasonic Testing (UT) rejects previously discovered and mapped on the bridge deck surface by QC, with the aid of OXY/FUEL cutting torch. The weld is a Complete Joint Penetration (CJP) butt joint for the OBG deck and is designated as 13W-W2.1.

The location of such heat transferring occurred at Y+248, Y+5180, Y+7910, and Y+9250 and are approximately 23mm in diameter. At the time of this QAI arrival, ABF welding personnel had completed Y+248, Y+5180, Y+7910 and was just finishing Y+9250, the heated area was a bright yellow at this location. This QAI informed ABF QC personnel Mr. Bernie Docena and Tony Sherwood of this incident and that an incident report will be generated; please see attached photos.

**Ultrasonic Testing (UT)**

This QAI inspector performed UT of approximately 10% of the area previously tested and accepted by ABF Quality Control personnel. This QAI Inspector generated an UT report for this date. All components were verbally requested by QC personnel; Mr. Bonifacio Daquinag Jr. The member(s) is/are identified as OBG 13W Floor Beam Flange Splice and K-Plate Stiffener Splice. The weld designations reviewed are as follows

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

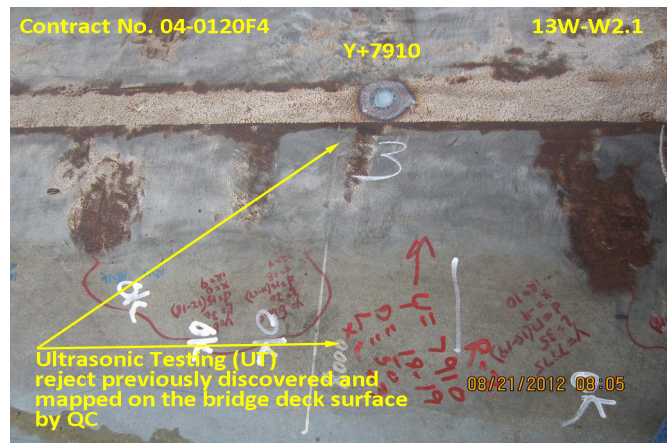
---

13W-PP120.6-13W-WK-S1 and 13W-PP121.5-W2.5-BF-1 and BF-2

PP122.2 Flange Plate to Stiffener Plate (485 HPS)

The QAI observed that welder 6235-Jose Torres, was welding multi-Pass welds at PP 122.2 Flange Plate to 485 Stiffener Plate in the overhead (4G) position. This QAI observed these parameters as defined in Welding Procedure Specification WPS-ABF-WPS-D15-1162-4. The QC inspector Barry Drake verified the fit-up for this location and found it to be acceptable, this information was relayed to the QAI. The welder then continued pre-heat throughout the area during welding using a propane type weed burner at 40 degrees Celsius (150 degrees F) which was verified using a tempilstik and infrared gun by the QC. The welder was using the Shielded Metal Arc Welding (SMAW) electrode E9018 for the Partial Joint Penetration (PJP) weld in the overhead (4G) position with 3.2 mm electrode with 123.6 amps. The welder utilized a power grinder and power wire wheel for the interpass cleaning. The QC inspector for this location was Steve Jenson and was observed verifying and documenting the welding parameters for this location, along with overseeing the welding operations. At the time METS observation was performed. No issues were noted by the QAI

The welder was grinding the starts and stops between weld layers to a bright metal. The location was still in process at the end of this QAI's shift



## Summary of Conversations:

As mentioned above between QA and QC concerning this project

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510 385 5910, who represents the Office of Structural Materials for your project.

---

**Inspected By:** DeArmond,Robert

Quality Assurance Inspector

---

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

**Reviewed By:**      Levell,Bill

QA Reviewer